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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,798	12/02/2003	Hiroyuki Minamikawa	645-143A	3347
47888	7590 05/03/2005		EXAMINER	
HEDMAN & COSTIGAN P.C. 1185 AVENUE OF THE AMERICAS			GROUP, KARL E	
NEW YORK,			ART UNIT	PAPER NUMBER
			1755	
			DATE MAILED: 05/03/2003	5

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)			
Office Action Summary		10/725,798	MINAMIKAWA ET	AL.		
		Examiner	Art Unit			
		Karl E. Group	1755	•		
The MAILING DATE Period for Reply	of this communication ap	ppears on the cover sheet w	vith the correspondence add	Iress		
after SIX (6) MONTHS from the m - If the period for reply specified about 16 NO period for reply is specified about 17 Failure to reply within the set or expected.	FHIS COMMUNICATION the under the provisions of 37 CFR 1 ailing date of this communication. we is less than thirty (30) days, a re bove, the maximum statutory period tended period for reply will, by statuder than three months after the mailing the statuder than three months after the statuder than the	.136(a). In no event, however, may a ply within the statutory minimum of th	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this col ABANDONED (35 U.S.C. § 133).			
Status		•				
2a) This action is FINAL	•	is action is non-final.	tters, prosecution as to the	merits is		
closed in accordance	e with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.			
Disposition of Claims						
<ul> <li>4) ☐ Claim(s) 1-46 is/are pending in the application.</li> <li>4a) Of the above claim(s) 13-24 and 36-46 is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-12 and 25-35 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
Replacement drawing	on is/are: a) ac uest that any objection to the sheet(s) including the corre	cepted or b) objected to e drawing(s) be held in abeya ction is required if the drawin		` '		
Priority under 35 U.S.C. § 11	9					
12) Acknowledgment is an	nade of a claim for foreig c) None of: es of the priority documer es of the priority documer certified copies of the pri m the International Burea	nts have been received. nts have been received in a ority documents have bee	Application No. <u>09/841,614</u> n received in this National S			
Attachment(s)						
1) Notice of References Cited (PT 2) Notice of Draftsperson's Paten 3) Information Disclosure Stateme Paper No(s)/Mail Date	Drawing Review (PTO-948)	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO- 	-152)		

Application/Control Number: 10/725,798

Art Unit: 1755

#### Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on 4-18-05 is acknowledged.

## Claim Rejections - 35 USC § 102 and 103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-12, 25-35 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Goto (5,972,816).

Goto teaches a glass ceramic composition including a beta-quartz phase having the composition:

SiO<sub>2</sub> 50-60 wt%

Page 3

Application/Control Number: 10/725,798

Art Unit: 1755

Al <sub>2</sub> O <sub>3</sub>	22-26
Li <sub>2</sub> O	3-5
MgO	.6-2
ZnO	.5-2
ВаО	.5-3
TiO <sub>2</sub>	1-4
ZrO <sub>2</sub>	1-4, see column 6, lines 35-50.

The thermal expansion is up to  $20 \times 10^{-7}$ /°C, column 7, lines 26-30. Also see specifically examples 1,4,8 which fall squarely within the claimed ranges.

It is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

### **Double Patenting**

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1755

6. Claims 1-12,25-35 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13/43 of copending Application No. 09/841614. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the copending claims overlap.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The copending claims and the claims differ in that they do not teach the exact same proportions. However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by copending claims overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

#### Conclusion

Page 5

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl E. Group whose telephone number is 571-272-1368. The examiner can normally be reached on M-F (6:30-4:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karl E Group /
Primary Examiner

Art Unit 1755

Keg 4-29-05